A Cup of React-Native

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سلام!

ما دقیقا

با چه چیزی

طرف هستیم؟

Main thread
(Native Queue)

RN Bridge

Javascript
thread
(JS Queue)

Java / Objective-c / Swift

JS Core

Main thread (Native Queue)

هنگام اجرا App شروع به کار میکند

App را باگذاری کرده

JS thread را اجرا میکند

UI event ها را گوش می‌کند

Javascript thread (JS Queue)

اجرای bundled JS

در بر گیرنده تمام Business Logic برنامه

```
import { Text, View } from 'react-native';

class AzinroApp extends Component {
  render() {
    return (
      <View>
        <Text>Hello ReactConf!</Text>
      </View>
    );
  }
}

export default AzinroApp;
```

ViewManager

new TextView(getContext())

```
JS->N : UIManager.createView([2,"RCTView",1,{"flex":1,"pointerEvents":"box-none"}])
JS->N : UIManager.createView([3,"RCTView",1,{"pointerEvents":"box-none","flex":1}])
JS->N : UIManager.createView([4,"RCTView",1,{"flex":1,"justifyContent":"center","alignItems":"center","backgroundColor":4294311167}])
JS->N : UIManager.createView([5,"RCTText",1,{"accessible":true,"allowFontScaling":true,"ellipsizeMode":"tail","disabled":false}])
JS->N : UIManager.createView([6,"RCTRawText",1,{"text":"Hello world"}])
JS->N : UIManager.setChildren([5,[6]])
JS->N : UIManager.setChildren([4,[5]])
JS->N : UIManager.setChildren([3,[4]])
JS->N : UIManager.createView([7,"RCTView",1,{"position":"absolute"}])
JS->N : UIManager.setChildren([2,[3,7]])
JS->N : UIManager.setChildren([1,[2]])
```
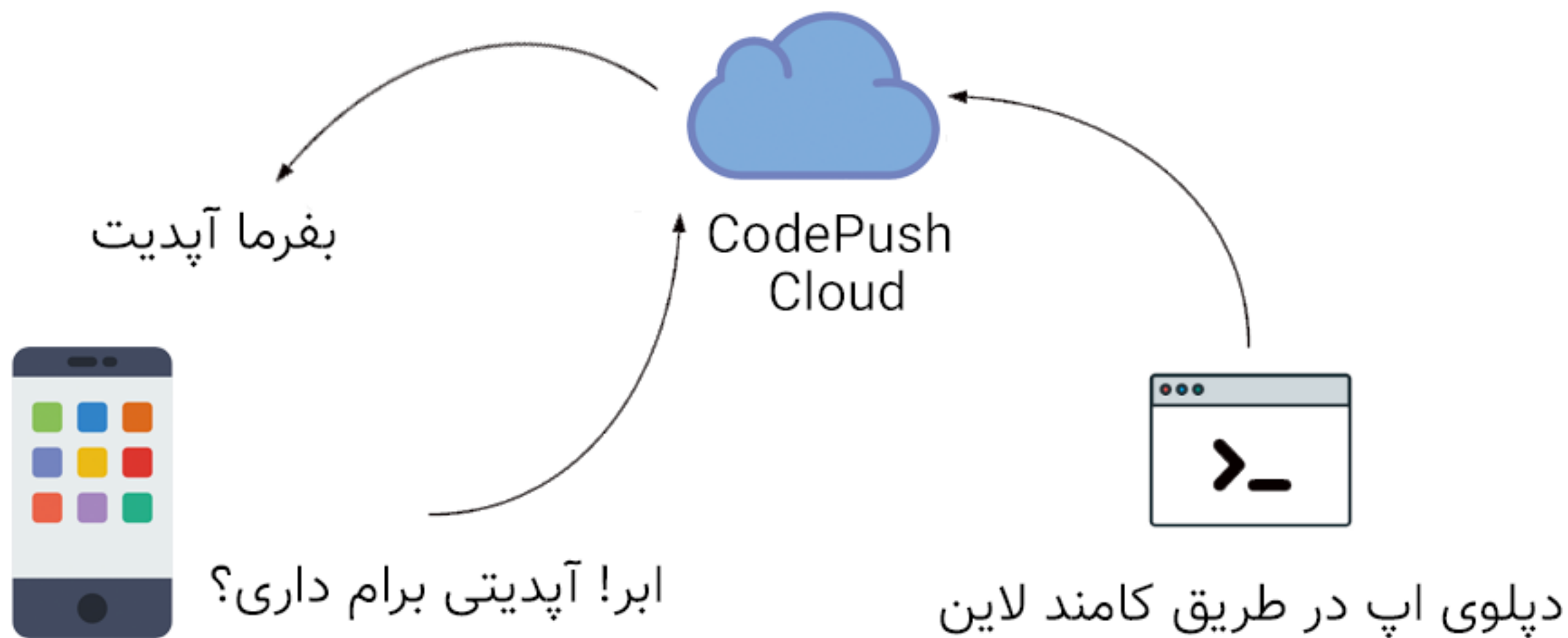
Bridge

ارتباط دوطرفه و Asynchronous
بین دو Thread

CodePush

آپدیت App بدون نیاز به ارائه نسخه جدید در Store ها

CodePush
Cloud

بفرما آپدیت

ابر! آپدیتی برام داری؟

دپلوی اپ در طریق کامند لاین

```javascript
import { AppRegistry } from 'react-native';
import codePush from "react-native-code-push";
let codePushOptions = { checkFrequency: codePush.CheckFrequency.ON_APP_RESUME };

import App from './src/app';

const AzinroApp = codePush(codePushOptions)(App);

AppRegistry.registerComponent('Azinro', () ⇒ AzinroApp);
```

CodePush

InstallMode

CheckFrequency

SyncStatus

UpdateState

InstallMode

چه زمانی می‌خواهم آپدیت اعمال شود؟

ON_NEXT_RESTART

ON_NEXT_RESUME

ON_NEXT_SUSPEND

IMMEDIATE

CheckFrequency

چه زمانی می‌خواهم App با سرور کدپوش سینک شود؟

ON_APP_RESUME

ON_APP_START

MANUAL

SyncStatus

وضعیت سینک شدن با سرور

DOWNLOADING_PACKAGE

INSTALLING_UPDATE

SYNC_IN_PROGRESS

UP_TO_DATE

Application Binary Interfaces (ABI)

```
ndk {
    abiFilters "armeabi-v7a", "x86"
}
```

Application Binary Interfaces (ABI)

```
ndk {
    abiFilters "armeabi-v7a", "x86", "arm64-v8a", "x86_64"
}
```

Release

./gradlew assembleRelease

./gradlew bundleRelease

Android App Bundle

- کمتر شدن حجم App بدون نیاز به refactor

- خروجی APK به صورت optimized بر اساس مشخصه موبایل کاربر

- Build سریعتر و...

Android App Bundle (.aab)

Android App Bundle (*.aab)

BUNDLE-METADATA/

BundleConfig.pb

Base Module (base/)

assets.pb
resources.pb
native.pb

manifest/
    AndroidManifest.xml

dex/
    classes.dex
    classes2.dex
    ...

root/
    com/...

    ...

res/

drawable/...
drawable-hdpi/...
drawable-xhdpi/...
...

values/...
values-en/...
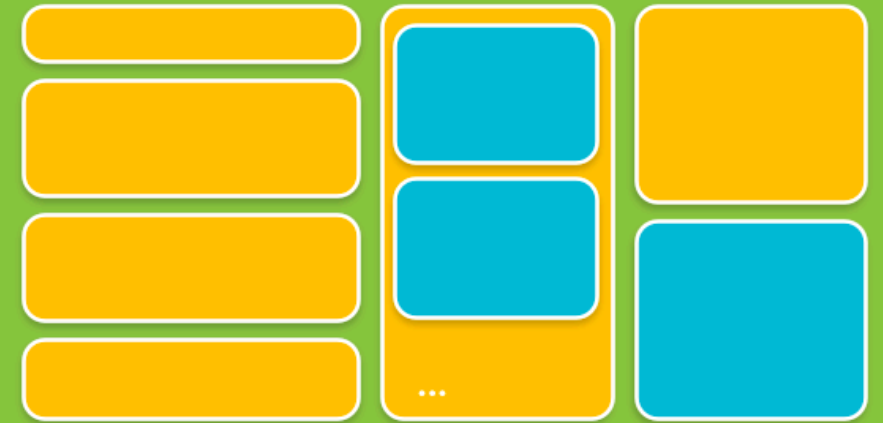values-fr/...
...

layout/...
xml/...

...

assets/
    textures/...
    sounds/...
    materials/...
    shaders/...
    licenses.txt

lib/
    x86/native-lib.so
    x86_64/...
    armeabi/...
    armeabi-v7a/...
    arm64-v8a/...

Dynamic Feature 1 (feature1/)

...

Dynamic Feature 2 (feature2/)

...

Android App Bundle (.aab)

ABI	Screen density	App download size ⑦	Devices
arm64-v8a	xxxhdpi	14.0 MB	VIEW DEVICES
arm64-v8a	xxhdpi	13.8 MB	VIEW DEVICES
arm64-v8a	xhdpi	13.3 MB	VIEW DEVICES
arm64-v8a	hdpi	13.1 MB	VIEW DEVICES
arm64-v8a	tvdpi	13.8 MB	VIEW DEVICES
arm64-v8a	mdpi	12.8 MB	VIEW DEVICES
arm64-v8a	ldpi	12.8 MB	VIEW DEVICES
armeabi-v7a	xxxhdpi	13.5 MB	VIEW DEVICES
armeabi-v7a	xxhdpi	13.3 MB	VIEW DEVICES
armeabi-v7a	xhdpi	12.8 MB	VIEW DEVICES
armeabi-v7a	hdpi	12.6 MB	VIEW DEVICES
armeabi-v7a	tvdpi	13.3 MB	VIEW DEVICES
armeabi-v7a	mdpi	12.3 MB	VIEW DEVICES
armeabi-v7a	ldpi	12.3 MB	VIEW DEVICES
x86_64	xxxhdpi	14.5 MB	VIEW DEVICES
x86_64	xxhdpi	14.3 MB	VIEW DEVICES
x86_64	xhdpi	13.8 MB	VIEW DEVICES

ممنون

@fatalerrs